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10/587,168	07/25/2006	Christian Eckelt	293260US6PCT	7274
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314		EXAMINER		
		HIJAZ, OMAR F		
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			3633	
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)			
	10/587,168	ECKELT ET AL.			
Office Action Summary	Examiner	Art Unit			
	OMAR HIJAZ	3633			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period versiller to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
3) Since this application is in condition for allowar	action is non-final. nce except for formal matters, pro				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4) Claim(s) 24-32 and 34-47 is/are pending in the 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 24-32 and 34-47 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	vn from consideration.				
9)☑ The specification is objected to by the Examine 10)☑ The drawing(s) filed on 25 July 2006 is/are: a)[ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	☐ accepted or b)☒ objected to be drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) \( \sum \) Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te			

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#### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 24, 2010 has been entered.

This communication is a Non-Final rejection Office Action on the merits. Claims 1-23 have been previously cancelled, claim 33 has been cancelled, claims 24-29, 31, 32, 36-40, 42, and 46 have been amended, and claim 47 has been newly added.

Therefore claims 24-32 and 34-47 are now pending and have been considered below.

#### Response to Amendment

1. The previous 35 USC 112 rejections are withdrawn in light of applicant's amendments.

#### Claim Objections

2. Claim 45 is objected to because of the following informalities:

As per claim 45, at lines 1-2, the recitation "at least two laminated glazing elements" is understood to mean --said at least two laminated glazing elements--.

## **Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "façade" of claim

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46 must be shown or the feature(s) canceled from the claim(s). **In addition**, the "at least three individual glazing elements" of claim 31 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 24-32 and 34-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 24, at lines 9-10, in the recitation "extends into the overlap region so that inside panel surfaces of the laminated glazing elements are contiguous", it is unclear as to what the "inside panel surfaces" is referring to. Is this the same as the "edge side" or "rim" of the panel?

In addition, at lines 10-11, the recitation "are contiguous and in perpendicular projection to one another" renders the claim indefinite because it is unclear as to how the surfaces would be contiguous and perpendicular.

In addition, at lines 13-14, the recitation "overlap region by another intermediate bonding layer" renders the claim indefinite because it is unclear as to what "another" bonding layer is referring to, since there was no mention of a first "intermediate bonding layer" only 'intermediate bonding layers", at lines 4-5 of the claim.

As per claim 31, at lines 5-6, the recitation "is situated between at least two projecting rims formed by at least two other individual glazing elements which protrude" renders the claim indefinite because it is unclear as to where or what the 'two other individual glazing elements" is referring to. Is this referring to adjacent elements in the direction of extension? In addition, at lines 8-10, the recitation "is situated between two recessed rims formed by at least two other individual glazing elements which are recessed" renders the claim indefinite because it is unclear as to where or what the "two

other individual glazing elements" is referring to. Is this referring to adjacent elements in the direction of extension?

As per claim 32, at lines 2-3, the recitation "the two successive laminated glazing elements" lacks antecedent basis.

As per claim 46, at line 1, the recitation "a plurality of glass glazing elements" renders the claim indefinite because it is unclear if this is referring to the same thing as "a plurality of individual glazing elements" recited in claim 24.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 24-30, 32, 34, 38, and 44-47, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Praeger (U.S. Patent No. 2,338,870) in view of Demars et al. (U.S. Patent No. 6,138,434).

As per claim 24, Praeger teaches an assembly device (partition construction; title), comprising: two laminated elements (panels 11 and 12; the panels are bonded; col. 2, lines 15-20), each including a plurality of individual elements (11a, 11b, 12a, 12b; note that the drawing in figure 2 is mislabeled, as the panel adjacent to 11a should read 11b, not 12b) the individual elements being rigid (plasterboard panels; col. 1, lines 25-30; it is understood that such materials are rigid) and assembled to one another at a surface by intermediate bonding layers (13), wherein the two laminated elements

succeed one another in a direction of extension (as illustrated, the elements 11 and 12 succeed each other in a direction of extension; figure 2), and partially overlap in an overlap region (as illustrated, the elements 11a and 12b overlap in an overlap region; figure 2) wherein only part of and at least one of, the individual elements of each of the two laminated elements extends into the overlap region (as illustrated, only part of the individual elements extends in the overlap region; figure 2), wherein the two laminated elements are assembled to one another in the overlap region (figure 2), by another intermediate bonding layer provided between said contiguous inside panel surfaces of the laminated elements (although Praeger does not disclose another bonding layer, it would be obvious to use adhesive 13 to also bond the overlapping portions together as well, in order to further secure the ends of the panels together).

Praeger fails to disclose that the panels are laminated glazing elements.

Demars et al. discloses a plurality of laminated glass elements (4 and 5) in a panel wall (figure 1).

Therefore from the teaching of Demars et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the partition construction of Praeger to include laminated glazing elements as taught by Demars et al. in order to provide for a transparent structure for aesthetics.

As per claim 25, Praeger teaches a thickness of the overlap region, which is equal to the sum of thicknesses of the individual glazing elements extending into the overlap region plus a thickness of the intermediate bonding layers, does not exceed a

As per claim 26, Praeger teaches an edge side of each of the laminated elements includes rims that are offset relative to one another in the direction of extension (as illustrated, the rims, or edges of each of the elements are offset relative to one another; figure 2), wherein the rims of one of the laminated elements are intended to be contiguous edge to edge with the rims of the other laminated elements (as illustrated, the edge of 11a are contiguous with the edge 11b; figure 2).

As per claim 27, Praeger teaches an edge side of each of the laminated glazing elements includes at least one projecting rim formed by at least one individual element which protrudes and at least one recessed rim formed by at least one individual element which is recessed (as illustrated, the edge of 12b is projecting with respect to 11b, while the edge of 12a is recessed with respect to 11a; figure 2).

As per claim 28, Praeger fails to disclose the at least one projecting rim is formed by several individual elements which are assembled to one another and the at least one recessed rim is formed by several individual glazing elements which are assembled to one another.

Demars et al. discloses a plurality of laminated glass elements (4, 5) with at least two laminated glazing elements assembled to one another by the assembly device (as illustrated, there are at least two laminated glazing elements assembled to one another; figure 2a). Therefore when Demars' panels (4, 5) replace Praeger's panels (11, 12)

each side would have 4 layers. Therefore, there will be two layers from each side extending into the overlap region.

Therefore from the teaching of Demars et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the laminated element of the partition assembly of Praeger to include several individual elements assembled to one another as taught by Demars et al. in order to further strengthen the structure by adding additional layers.

As per claim 29, Praeger teaches in the direction of extension, the at least one projecting rim of one of the laminated elements follows the at least one recessed rim of the other laminated element (as illustrated, the edge of 12b is projecting and follows the edge of 12a, which is recessed; figure 2).

As per claim 30, Praeger teaches two rims offset relative to one another form a staggered formation on the edge side of each of the laminated elements (as illustrated, the elements 12a and 12b are staggered with respect to elements 11a and 11b; figure 2).

As per claim 32, Praeger fails to disclose in the overlap region, at least one mechanical retention member connecting the two laminated elements is provided.

Demars et al. discloses a plurality of laminated glass elements (4, 5) with at least one mechanical retention member (fastening element 12) connecting the successive laminated glazing elements is provided (figure 2a).

Therefore from the teaching of Demars et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the partition

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construction with the overlapping edges of Praeger to include laminated glazing elements connected with a mechanical fastener as taught by Demars et al. in order to further fasten the elements together.

As per claim 34, Praeger fails to disclose in the overlap region, at least one through-hole passing through the laminated glazing elements latter is provided for insertion of a mechanical retention member.

Demars et al. discloses a plurality of laminated glass elements (4, 5) with at least one through-hole (9) passing through the laminated glazing elements (figure 2a) is provided for insertion of a mechanical retention member (fastening element 12).

Therefore from the teaching of Demars et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the partition construction with the overlapping edges of Praeger to include successive laminated glazing elements connected with a mechanical fastener as taught by Demars et al. in order to further fasten the elements together.

As per claim 38, Praeger in view of Demars et al. discloses the mechanical retention member comprises end washers (end washers 15 and 16) to mask the through-hole on an outside of the assembly device (figure 2a).

As per claim 44, Praeger in view of Demars et al., discloses glass elements but fails to disclose the individual glazing elements are made of partially prestressed or prestressed glass.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use prestressed glass with the glazing assembly since it has

been held to be within the general skill of a worker in the art to select a material on the basis of its suitability for the intended use as a matter of obvious design choice, and prestressed glass provides for a stronger glazing assembly.

As per claim 45, Praeger in view of Demars et al. discloses at least two laminated glazing elements assembled to one another by the assembly device (as illustrated, there are at least two laminated glazing elements assembled to one another; figure 2a of Demars).

As per claim 46, Praeger fails to disclose a façade, comprising a plurality of glass glazing elements situated in a plane, which is reinforced transversely to the plane against acting forces by at least one construction module.

Demars et al. discloses a façade (col. 1, lines 15-20), comprising a plurality of glass glazing elements (4) in a plane (figure 2a), which is reinforced transversely to the plane against acting forces (it is understood that such a structure is capable of resisting forces).

Therefore from the teaching of Demars et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the partition construction with the overlapping edges of Praeger to be part of a façade attached to a framework as taught by Demars et al. in order to cerate smooth bond between the glazing elements.

As per claim 47, Praeger in view of Demars et al. discloses the two laminated elements are assembled to one another in the overlap region so that outside panel surfaces of the laminated elements are in axial alignment (it is understood that if

Praeger was modified to include the through holes of Demars et al., then the laminated elements in the overlap region would be axially aligned).

8. Claims 31, 35-37, 39, and 41-43, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Praeger (U.S. Patent No. 2,338,870) in view of Demars et al. (U.S. Patent No. 6,138,434) and further in view of Hermens et al. (German Patent DE 10063547 C1 with English equivalent translation U.S. Pub. 2004/0055697).

As per claim 31, Praeger further teaches at least one recessed rim, which is formed by at least one recessed individual element and whereas an adjoining edge side of the other marinated element includes at least one projecting rim which is formed by at least one protruding individual element (as illustrated, the edge of 12b is projecting and follows the edge of 12a, which is recessed; figure 2).

The Praeger and Demars et al. combination fails to disclose each of the laminated elements comprises at least three individual glazing elements.

Hermens et al. discloses a plurality of laminated glass elements (abstract) including at least three individual glazing elements (11, 12, and 13).

Therefore from the teaching of Hermens et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the partition construction with the recessed and projecting edges of the Praeger and Demars et al. combination to include laminated glazing elements with at least three glazing elements as taught by Hermens et al. in order provide for a more strengthened the structure.

As per claim 35, the Praeger and Demars et al. combination fails to disclose the mechanical retention member comprises means for centering a longitudinal axis of the mechanical retention member passing through the laminated glazing elements along an axis of the through-hole.

Hermens et al. discloses a glazing assembly (abstract) with a mechanical retention member (fastening element 60) whereby the mechanical retention member comprises means for centering a longitudinal axis of the mechanical retention member passing through the laminated glazing elements along an axis of the through-hole (as illustrated, the fastening element 60 is centered through the glazing elements via a means for centering; figure 2).

Therefore from the teaching of Hermens et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made, to replace the fastening element with the overlapping edges of the Praeger and Demars et al. combination with the mechanical fastener with centering means in a through-hole as taught by Hermens et al. in order to better fasten the elements together in a centered manner.

As per claim 36, Praeger in view of Demars et al., and further in view of Hermens et al. discloses the mechanical retention member is centered fixedly along the axis of a hole in an individual glazing element of a first of the laminated glazing elements (figure 2), and comprises means for compensating for off-center positioning (eccentric rings 40 and 43) of the axis of a hole in an individual glazing element of the second of the laminated glazing elements outside the axis of the hole in the individual glazing element

of the first of the laminated glazing elements (as illustrated, the eccentric rings 40 and 43, are adapted as a means for positioning the fastening assembly; figure 2).

As per claim 37, Praeger in view of Demars et al., and further in view of Hermens et al. discloses the mechanical retention member comprises: at least one sleeve (bush 50) configured to be inserted in the through-hole (figure 2), a centering ring (41) surrounding the sleeve (figure 2) and configured to be adjusted in the hole with the centering ring in circumferential alignment with an external diameter of the sleeve and a diameter of the hole (it is well known that centering rings are adjustable and are configured to align and center elements being clamped together), and eccentric rings (eccentric rings 40 and 43) configured to rotate relative to one another and configured to be adjusted in the hole (it is understood that eccentric rings are adapted to be rotated upon adjustment in a bore or hole), with one of the eccentric rings (43) in circumferential alignment with the external diameter of the sleeve (figure 2) and another one of the eccentric rings (40) in circumferential alignment with a diameter of the hole (as illustrated, the ring 40 is in circumferential alignment with the diameter of the hole; figure 2).

As per claims 39 and 42, Praeger in view of Demars et al. discloses the mechanical retention member comprises end washers (end washers 15 and 16) to mask the through-hole on an outside of the assembly device (figure 2A).

As per claim 39, Praeger in view of Demars et al. and further in view of Hermens et al., discloses the sleeve is immobilized along a longitudinal axis of the sleeve in the through-hole after tightening or screwing (as illustrated, the nuts 61 and 62 are adapted

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to screw the fastening assembly in place; figure 2 of Hermens et al.; it is understood that with a washer of proper dimensions, this would tighten all of the members together and therefore if tightened tight enough, the sleeve 50 would be immobilized).

As per claim 41, Praeger in view of Demars et al., and further in view of Hermens et al. discloses after installation of the mechanical retention member in the through-hole, remaining hollow spaces in the through-hole are filled with a mass of filler (molding resin 9; figure 2).

As per claim 42, Praeger in view of Demars et al. and further in view of Hermens et al. discloses orifices (ducts 70 and 71 of Hermens et al.) for insertion of the mass of filler (molding resin 9 of Hermens et al.).

As per claim 43, Praeger in view of Demars et al. fails to disclose the end washers further comprise orifices for the discharge of air displaced by the inserted mass of filler, however, Hermens et al. discloses that the clamping nuts 23 and 24 may have air-exhaust ducts machined in to release air bubbles (paragraph 32 of Hermens et al.), and therefore it would have been obvious to place such ducts in the washers of Demars et al. in order to provide a further means for ventilation.

9. Claim 40, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Praeger (U.S. Patent No. 2,338,870) in view of Demars et al. (U.S. Patent No. 6,138,434), and further in view of Kreyenborg et al. (U.S. Patent No. 6,623,203).

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As per claim 40, the Praeger and Demars et al. combination discloses all of the elements of the claimed invention, Demars et al further discloses the end washers are applied flat on the outside panel surfaces (figure 2a).

The Praeger and Demars et al. combination fails to disclose intermediate shims.

Kreyenborg et al. discloses a clamp fixture to fasten glass plates (abstract) with shims 19 (col. 5, lines 40-50).

Therefore from the teaching of Kreyenborg et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the glazing assembly of the Praeger and Demars et al. combination to include shims in the glass assembly as taught by Kreyenborg et al. in order to properly tighten and secure the glass element without further damage to the glass.

#### Response to Arguments

10. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that the cited combination of primary reference Praeger and secondary reference Demars et al. does not disclose or suggest "two laminated glazing elements each including a plurality of individual glazing elements...assembled to one another at a surface by intermediate bonding layers...the two laminated glazing elements are assembled to one another in the overlap region by another intermediate bonding layer provided between said contiguous inside panel surfaces of the laminated glazing elements". However, Praeger discloses panels assembled together in an overlap region and although Praeger's panels are not of glazing material, it would have been obvious to use glazing material for aesthetics. In addition, some of the language

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in this claim including "another intermediate bonding layer" are rejected under 112 for confusing the scope of the claim (see above). In addition, applicant argues that Praeger does not disclose an additional intermediate bonding layer, however per the 112 rejection (above) it is unclear as to what this is referring to. However, it is important to note that providing additional bonding or fastening layers is well known in the art and would be obvious to further create a strengthened bond between two members. In addition, applicant argues that secondary reference Demars et al. does not disclose elements which succeed one another in a direction of extension and partially overlap in an overlap region or that inside panel surfaces of the laminated elements are contiguous and in perpendicular projection to one another in the overlap region. However, the office action is not relying on Demars et al. to show these features, for they are already taught by the primary reference Praeger.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR HIJAZ whose telephone number is (571)270-5790. The examiner can normally be reached on Mon-Fri 9:30 a.m. - 7:00 p.m. (alternating Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571)272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OFH

/Brian E. Glessner/
Primary Examiner, Art Unit 3633